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SIEMENS CORPORATION
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| EXAMINER |
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CHANG, SUNRAY

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2121

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/763,786 | Applicant(s) FISCHER ET AL. | |
| | Examiner Sunray R. Chang | Art Unit 2121 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7 and 14-25 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 8-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7 and 14-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20110222</u> | 6) <input type="checkbox"/> Other: _____ |

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Examiner's Detailed Office Action

1. This office action is in responsive to the paper filed on November 22nd, 2010;
BPAI decision – Examiner affirmed on 10/29/2009;
Abandoned on 01/15/2010;
Petition for revival on 2/10/2010, was dismissed on 09/20/2010;
Renewed Petition for revival with RCE filed on 11/22/2010; was granted on 01/25/2011.
Claims 1 – 5, 7 and 14 – 25 are presented for examination; therein, claims 6, 8 – 13 have been cancelled, claims 15 – 25 are newly proposed claims.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted to disclose 37 C.F.R. 1.56 all pertinent information and material pertaining to the patentability of applicant's claimed invention, on 02/22/2011 has been considered by the examiner.

Response to Arguments

3. Applicant's arguments have been fully considered, however, they are not persuasive.

Claim Objection

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4. Claim 16 is objected to because of the following informalities: claimed “which is used in the creation the process control function” needs to be corrected to either “which is used in creating the process control function” or “which is used in the creation of the process control function”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 2 recites the limitation “Internet” in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1 – 5, 7 and 14 – 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Papadopoulos et al. (USPN 6,282,454, hereinafter, **Papadopoulos**) in view of Mori et al.

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(USPN 5,103,392, hereinafter, **Mori**), further in view of **Baker** et al. (USPN 7,035,898, hereinafter, **Baker**).

Regarding claim 1,

Papadopoulos teaches,

- a process control system, [industrial control system, Col. 2, lines 33 – 36]
- operation running in the process control system (application program to display, Col. 4, lines 1 – 6; enables the data transfer between the application program and the user through the Internet, Col. 3, lines 48 – 60; Programmable logic controllers (PLCs) are widely used in industry and process control, Col. 2, lines 8 – 12; Using this interface, the user can retrieve all pertinent data regarding the operation of the PLC, including PLC configuration, I/O and register status, operating statistics, diagnostics, and distributed I/O configurations. Updates to operating software can also be downloaded through the Internet access, Col. 2, lines 58 – 63);
- the operations regarding the creation of a process control (allow a user at a remote location, using a browser, to view the mimic page and actually control various components ... a simple motor start-stop control ... pushing a motor start push button ... which will remain running until stop push button is depressed ..., see col. 9, lines 30 – 55)

Papadopoulos does not teach a processor that determines a payment figure to be charged to a user regarding an operation running in a system;

Mori, in analogous art, teaches a processor unit that determines a payment figure to be charged to a user regarding an operation running in a system (a system for storing the history of use of marketable programs (software) such as marketable computer programs. By storage of the history of use, proprietors of marketable programs can charge for the exact amount of use of the software. Specifically, the system allows proprietors to obtain information on the exact state of use of software by a specific user and charge appropriately for that use, Col. 1, lines 14 – 23);

Baker has been cited to teach providing a processor unit adapted to record the creation and/or removal of a process control function and an execution of an automation function; (The present invention allows a user at a remote location, using a browser, to create and edit a PLC operating program by adding and deleting various components illustrated in the mimic page; Rearranging the components on the mimic page will result in a different operating program. The program can be saved on the programming device 21 for later transfer to the PLC 32. Col. 6, lines 42 – 61), for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet (see Col. 6, lines 42 – 44)

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Papadopoulos et al. to include "a method for

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determining a payment figure, providing a processor unit adapted to record the creation and/or removal of a process control function and an execution of an automation function; providing a device adapted to record a user activity; and determining a payment figure by the processor unit using recorded data of the preceding steps”, for the purpose of making the use of such software more attractive to users [Mori et al., Col. 1, lines 14 – 23] and for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet [Baker et al., Col. 6, lines 42 – 44].

It would have been obvious to a person of ordinary skill in the art at the time of applicant’s invention to modify the teaching of **Papadopoulos** to include “a processor that determines a payment figure to be charged to a user regarding the creation of a function”, for the purpose of making the use of such software more attractive to users [Col. 1, lines 14 – 23].

Regarding claim 2, Papadopoulos teaches the process control system in claim 1 further comprising:

- Internet;
- a process control computer (industrial control system, Col. 2, lines 33 – 36; Fig. 1; further see Col. 3, lines 29 – 47); and

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- a client computer connected to the process control computer via the Internet; (allow a user at a remote location, using a browser to view the mimic page and actually control various components, see col. 9, lines 30 – 39; a user at a remote location will browse the Internet for the home page of the installation of the programmable logic controller system, see col. 9, lines 56 – 67; personal computer, Fig. 1; further see Col. 3, lines 29 – 47) wherein
- at least a part of the operations run on the process control computer. [Programmable logic controllers (PLCs) are widely used in industry and process control, Col. 2, lines 8 – 12; Using this interface, the user can retrieve all pertinent data regarding the operation of the PLC, including PLC configuration, I/O and register status, operating statistics, diagnostics, and distributed I/O configurations. Updates to operating software can also be downloaded through the Internet access, Col. 2, lines 58 – 63; Fig. 1]

Regarding claim 3, Papadopoulos further teaches,

- at least one field device for automation of at least one system component (PLC, application programs, a ladder program for controlling the I/O devices, Col. 4, lines 36 – 46) wherein
- at least a part of the operations run on the field device. [the application programs, a ladder program for controlling the I/O devices, Col. 4, lines 36 – 46]

Regarding claim 4, Papadopoulos further teaches,

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- the process control computer comprises a Web server (Web server module, Web site, Fig. 1 – 3; further see Col. 3, line 29 – Col. 4, line 35) and
- the client computer comprises an Internet browser [a personal computer (PC) 8 having a commercially available browser, Col. 3, lines 22 – 47] so that
- the client computer influences the operations running in the process control computer (the browser 10 functions as a remote human-machine interface or HMI control of the process control system, Col. 4, lines 1 – 6) via the Internet, (see Fig. 1 and further col. 9, lines 30 – 67) wherein
- the operations initiate further operations in a component of the process control system. (application program, Col. 3, lines 48 – 60, application programs includes a ladder logic program for controlling the I/O devices ... to send commands to the PLC and receive the response, Col. 4, lines 36 – 46)

Regarding claim 5,

Papadopoulos further teaches the component comprise a field devices for monitoring and control of a further component of a technical system (PLC, application programs includes a ladder logic program for controlling the I/O devices ... to send commands to the PLC and receive the response, Col. 4, lines 36 – 46)

Papadopoulos does not teach radio communication;

However, **Baker** teaches wireless communication (communication network can comprise any combination of wired and wireless technology; see col. 6, lines 62 – 64) which is well known a cable replacement plan.

Note, IEEE Std 802.11a, b, g is well know wireless network (LAN) connection which is radio based wireless communication.

Regarding claim 7,

Papadopoulos does not teach the payment figure is a service fee to be paid by the user to an Application Service Provider.

Mori teaches a payment figure is a service fee to be paid by the user to an Application Service Provider. (use of software by a specific user and charge appropriately for that use, Col. 1, lines 20 – 21), for the purpose of making the use of such software more attractive to users.

Regarding claim 14,

Papadopoulos teaches

- a process control system (industrial control system, Col. 2, lines 33 – 36);
- operations regarding the creation of a process control (allow a user at a remote location, using a browser, to view the mimic page and actually control various components ... a

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simple motor start-stop control ... pushing a motor start push button ... which will remain running until stop push button is depressed ..., see col. 9, lines 30 – 55)

Papadopoulos does not teach a method for determining a payment figure, recording a user activity, and determining a payment figure to be charged to a user using recorded data of the user activities;

Mori teaches,

- a method for determining a payment figure (a system for storing the history of use of marketable programs (software) such as marketable computer programs. By storage of the history of use, proprietors of marketable programs can charge for the exact amount of use of the software. Specifically, the system allows proprietors to obtain information on the exact state of use of software by a specific user and charge appropriately for that use, Col. 1, lines 14 – 23);
- recording a user activities in using a system (storage of the history of use, the system allows proprietors to obtain information on the exact state of use of software by a specific user, Col. 1, lines 14 – 23); and
- determining a payment figure by the processor unit using recorded data of the user activities. [the system allows proprietors to obtain information on the exact state of use of software by a specific user and charge appropriately for that use, Col. 1, lines 14 – 23], for the purpose of making the use of such software more attractive to users [Col. 1, lines 14 – 23];

Baker has been cited herein to teach:

- providing a processor unit adapted to record the creation and/or removal of a process control function and an execution of an automation function; (The present invention allows a user at a remote location, using a browser, to create and edit a PLC operating program by adding and deleting various components illustrated in the mimic page; Rearranging the components on the mimic page will result in a different operating program. The program can be saved on the programming device 21 for later transfer to the PLC 32. Col. 6, lines 42 – 61), for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet (see Col. 6, lines 42 – 44);

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Papadopoulos et al. to include "a method for determining a payment figure, providing a processor unit adapted to record the creation and/or removal of a process control function and an execution of an automation function; providing a device adapted to record a user activity; and determining a payment figure by the processor unit using recorded data of the preceding steps", for the purpose of making the use of such software more attractive to users [Mori et al., Col. 1, lines 14 – 23] and for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet [Baker et al., Col. 6, lines 42 – 44].

Regarding claims 15 and 20, Baker teaches the creation of the process control function is undertaken by the user (allows a user at a remote location, using a browser, to create and edit a PLC operating program by adding and deleting various components illustrated in the mimic page; Rearranging the components on the mimic page will result in a different operating program. The program can be saved on the programming device 21 for later transfer to the PLC 32. Col. 6, lines 42 – 61)

Regarding claims 16 and 21, Baker teaches providing a plurality of pre-specified functions, wherein the user selects at least one of the plurality of pre-specified functions which is used in creating the process control function (The present invention allows a user at a remote location, using a browser, to create and edit a PLC operating program by adding and deleting various components illustrated in the mimic page; Rearranging the components on the mimic page will result in a different operating program. The program can be saved on the programming device 21 for later transfer to the PLC 32. Col. 6, lines 42 – 61), for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet (see Col. 6, lines 42 – 44).

Regarding claims 17 and 23, Baker teaches the payment figure is further based on a removal of the created process control function (The present invention allows a user at a remote

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location, using a browser, to create and edit a PLC operating program by adding and deleting various components illustrated in the mimic page; Rearranging the components on the mimic page will result in a different operating program. The program can be saved on the programming device 21 for later transfer to the PLC 32. Col. 6, lines 42 – 61), for a user at a remote location to edit the operating program of the PLC 32 by accessing a web page associated with the program package 33 via the Internet (see Col. 6, lines 42 – 44, note: all user activities to control functions can be found in col. 2, line 50 – col. 3, line 45 and detail can be found in col. 4 – col. 6).

Regarding claims 18, 19, 24 and 25, Baker teaches the payment figure is further based on an execution of an automation function (a system for programming an application program controlling a factory automation device on a communication network, see at least in col. 2, lines 50 – 61)

Regarding claim 22, Baker teaches the user downloads at least one of the plurality of pre-specified functions in order to create the process control function (The application program 22 provides an operating program to the PLC 32. The PLC 32 operating program can be created or edited remotely from the PLC and then transmitted to the PLC for use in the communication

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network, see col. 4, lines 48 – 64 and FTP used in managing application programs, see col. 6, lines 6 – 20).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. via telephone number (571) 272-3682 or facsimile transmission (571) 273-3682 or email sunray.chang@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819.

The official facsimile transmission number for the organization where this application or proceeding is assigned is (571) 273-8300.

Sunray Chang
Patent Examiner
Group Art Unit 2121

/ALBERT DECADY/
Supervisory Patent Examiner, Art Unit 2121

April 11, 2011